## **General Notes for Reviewers**

For the purpose of early review this draft is formatted as though it will be a section in Chapter 4. This choice is not intended to prejudice whether provisions are put in one place and/or put in other places. It does make it easier to see all the parts.

For easy reference, certain codes texts from the CBSC are shown below the draft language.

This draft includes some distinctions based on occupancy and use groups. The intent is not to prejudice whether additional occupancy-based distinctions will be included, in particular for Use Group R-3. DWR anticipates preparing draft code for the residential code that HCD has indicated it will propose.

This draft does not capture existing buildings. If it is determined to be appropriate, the initial thought is to use the same trigger for seismic upgrade (not the flood requirement based on 50% of market value).

Notes to reviewers are shown [in brackets and italicized text].



## **SECTION XXX**

# AREAS PROTECTED BY THE FACILITIES OF THE CENTRAL VALLEY FLOOD PROTECTION PLAN

## XXX.1 Scope.

The provisions of this section shall apply to the construction of buildings and structures in areas protected by the facilities of the Central Valley Flood Protection Plan where flood levels are anticipated to exceed three feet for the 200-year flood event. Except as specifically required by this section, buildings and structures shall meet applicable provisions of this code.

**XXX.1.1** Construction documents. In local jurisdictions located in the Central Valley, if the land on which the proposed work is to be constructed is located in an area protected by the facilities of the Central Valley Flood Protection Plan, the construction documents shall include the WSEL200 and the elevation(s) of the floor(s), and, as applicable, the elevation(s) and slopes of roofs, of the building or structure.

### XXX.2 Definitions.

The following words and terms shall, for the purposes of this section, have the meanings shown.

AREAS PROTECTED BY THE FACILITIES OF THE CENTRAL VALLEY FLOOD PROTECTION PLAN WHERE FLOOD LEVELS ARE ANTICIPATED TO EXCEED THREE FEET FOR THE 200-YEAR FLOOD EVENT. Geographical areas identified by the state as "Areas Protected by the Facilities of the Central Valley Flood Protection Plan where Flood Levels are Anticipated to Exceed Three Feet for the 200-Year Flood Event" in accordance with the Health and Safety Code Section 50465. Published data from the California Department of Water Resources can be obtained online at the following website: <a href="http://www.water.ca.gov/floodmgmt/">http://www.water.ca.gov/floodmgmt/</a>.

**Note.** The facilities of the Central Valley Flood Protection Plan are identified in the following counties: Butte, Colusa, Contra Costa, Fresno, Glenn, Lake, Madera, Merced, Modoc, Plumas, Sacramento, San Joaquin, Solano, Stanislaus, Sutter, Tehama, Yolo, and Yuba. Determination of additional facilities is ongoing. [In several places, the CBSC includes similar explanatory "notes" added by the State.]

**CENTRAL VALLEY.** Any lands in the bed or along or near the banks of the Sacramento River and the San Joaquin River, and any of their tributaries or connected therewith, or upon any land adjacent thereto, or within any of the overflow basins thereof, or upon any land susceptible to overflow therefrom. The following counties and the incorporated municipalities within these

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counties, in whole or in part, are in the Central Valley: Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Benito, San Joaquin, Shasta, Sierra, Siskiyou, Solano, Stanislaus, Sutter, Tehama, Tuolumne, Yolo, and Yuba. A map that delineates the Central Valley can be obtained online at the following website:

<a href="http://www.water.ca.gov/floodmgmt/">http://www.water.ca.gov/floodmgmt/</a>
. [This definition is patterned after the definition of "Sacramento-San Joaquin Valley" found in the Health and Safety Code.]

**EVACUATION LOCATION.** A location above the WSEL200 where occupants are expected to congregate pending evacuation and from which occupants may be evacuated during conditions of flooding, such as a space within the building that has an exit door or operable window; a deck, balcony, porch, rooftop platform, or rooftop area; or combinations thereof.

FACILITIES OF THE CENTRAL VALLEY FLOOD PROTECTION PLAN. The state and federal flood control works (levees, weirs, channels, and other features) of the Sacramento River Flood Control Project described in Water Code Section 8350, and flood control projects in the Sacramento River and San Joaquin River watersheds authorized pursuant to Article 2 (commencing with Water Code section 12648) of Chapter 2 of Part 6 of Division 6 for which the Central Valley Flood Protection Board or the Department of Water Resources has provided the assurances of nonfederal cooperation to the United States, and those facilities identified in Water Code Section 8361.

**ROUTE TO THE EVACUATION LOCATION**. The path through and along which occupants move from the habitable areas of a building or structure that are below the WSEL200 to the evacuation location.

**WSEL200.** The water surface elevation (WSEL) of the 200-year flood event that is identified by the state when it identifies areas that receive protection from the facilities of the Central Valley Flood Protection Plan.

# XXX.3 Structural stability.

**XXX.3.1** General. Buildings and structures shall be designed, constructed, connected and anchored to resist flotation, collapse or permanent lateral movement resulting from the hydrostatic loads anticipated during conditions of flooding anticipated for the 200-year flood event.

**XXX.3.2 Determination of loads.** Hydrostatic loads, based on the depth of water determined by the WSEL200 shall be determined in accordance with Chapter 5 of ASCE 7. Reduction of hydrostatic loads may be accomplished by allowing for the automatic entry and exit of floodwaters to minimize unbalanced loads. Such means shall be

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designed by a registered design professional and include, but are not limited to, openings, valves, and panels designed to fail under load.

## **XXX.4** Evacuation Locations.

- **XXX.4.1 Required.** An evacuation location and a route to the evacuation location shall be provided.
- **XXX.4.2 Route to evacuation location.** The route to an evacuation location shall meet the accessibility requirements applicable to the occupancy. A route shall be allowed through any number of intervening rooms or spaces. Doors along the route shall be openable without the use of a key, lock, special knowledge or effort.
- **XXX.4.3 Doors to rooftops, decks, balconies, and porches.** If rooftops, decks, balconies, and porches are not intended for regular use, doors to such roofs, decks, balconies, and porches shall have exit alarms that make audible, continuous alarm sounds when the door is opened. Exit alarms shall be connected to the electrical wiring of the building. [Patterned after definition of "exit alarm" in 3109.4.4.1
- **XXX.4.3 Minimum size requirements.** Evacuation locations shall provide a minimum gross floor area of 7 sq ft per occupant, based on the average anticipated occupancy of the portions of the building that are below WSEL200.

[DWR's Building Code Team is in discussion of the merits and means to advise occupants of the evacuation location and route.]

- **XXX.5** Space within the building. If the evacuation location is a space within a building, the evacuation location shall be provided with a means for occupants to be evacuated out of the building specified in Section XXX.5.1, Section XXX.5.2, or Section XXX.5.3. The means for occupants to be evacuated out of the building shall address the mobility of the occupants.
  - **XXX.5.1** Windows, minimum size and dimensions. One or more windows shall be provided that meet the minimum size, minimum dimensions, and operational constraints of Section 1026. The number of such windows shall be appropriate for the occupancy or occupancies of the portions of the building that are below WSEL200.

**Note:** It is the intent of this section that windows be of sufficient number, sizes, and dimensions to reasonably accommodate the needs and limitations of the occupants of the building. Reasonable judgment in the application of this requirement must be exercised by the building official. [In several places, the CBSC includes text added by the State that uses the term "reasonable." For example, see 907.2.10.5.1, where the addition of a "note" is used also.]

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**XXX.5.2 Exterior doors to decks, balconies and porches.** Exterior doors to decks, balconies and porches shall be sized in accordance with Section 1008.

**Exception:** In buildings or portions of buildings and facilities within the scope of Chapter 11A, doors to decks, balconies, and porches shall comply with Section 1132A.1.

**XXX.5.3** Means of escape to rooftops from spaces within a building. In Group I, Group E, and Group R occupancies that are subject to the requirements of Chapter 11A or Chapter 11B, such requirements shall apply to the means of escape to rooftops. In all other occupancies, the means of escape to rooftops shall be provided by a stairway, ramp, alternating tread device, or fixed ladder, or other means approved by the building official.

**XXX.6 Decks and balconies that are evacuation locations.** Decks and balconies that are above the WSEL200 shall be permitted to be evacuation locations. When a deck or balcony used as an evacuation location is not at the same level as a floor the building structure, it shall be accessible by a stairway, ramp, alternating tread device, fixed ladder, or other means approved by the building official.

**XXX.6.1 Live load.** Decks and balconies that are evacuation locations shall be designed for a live load of 100 psf. [See Table 1607.2 when calls for balconies (other than 1- and 2- family homes) to be 100 psf; decks to be "same as occupancy served", marquees to be 75 psf.]

**XXX.6.2** Evacuation route. In Group I, Group E, and Group R occupancies that are subject to the requirements of Chapter 11A or Chapter 11B, such requirements shall apply to the evacuation routes to decks and balconies that are evacuation locations. In all other occupancies, access to such evacuation locations shall be provided by a stairway, ramp, alternating tread device, or fixed ladder, or other means approved by the building official.

**XXX.7 Rooftop evacuation locations.** Rooftop evacuation locations include rooftop platforms and rooftop areas.

**XXX.7.1 Rooftop platforms required.** A rooftop platform shall be provided if the roof covering materials is:

- 1. Clay tile, concrete tile, slate shingles, wood shingles, or wood shakes, and the roof slope is three units vertical in 12 units horizontal (25-percent slope) or greater.
- 2. Metal roof panels or metal roof shingles, and the roof slope is one unit vertical in 12 units horizontal (8.33-percent slope) or greater.

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**XXX.7.2 Roof live loads.** Roof areas that are rooftop evacuation locations and roofs that support rooftop platforms that are evacuation locations shall be designed for a roof live load of 50 psf. [See Table 1607.2 and see the note above for XXX.6.1]

**XXX.7.3 Evacuation routes to rooftop evacuation locations.** In Group I, Group E, and Group R occupancies that are subject to the requirements of Chapter 11A or Chapter 11B, such requirements shall apply to the evacuation routes to rooftop evacuation locations. In all other occupancies, access to rooftop evacuation locations shall be provided by a stairway, ramp, alternating tread device, or fixed ladder, or other means approved by the building official.

**XXX.8 Alternate means of protection.** [This is patterned after Sec. 111.2.4 and .5 of the CFC.]

# XXX.8.1 Request for approval of alternate means of protection.

Requests for approval to use an alternative means of protection shall be made in writing to the building official by the owner or the owner's authorized representative. The request shall be accompanied by a full statement of the conditions and sufficient evidence that the proposed alternate means of protection provides reasonable protection to occupants. The building official shall require the owner to obtain a written statement from the applicable emergency management authority regarding plans and processes related to notification of anticipated conditions of flooding, warnings, evacuations, and other pertinent conditions. The building official shall also require the owner to obtain a written statement from the entity that has jurisdiction over the management, maintenance, monitoring, and control of flood protection works in the vicinity of the location of the owner's property, such statement shall comment on the viability of the proposed alternate means of protection. The building official may request written statements from the Central Valley Flood Protection Board, the California Department of Water Resources, and the Governor's Office of Emergency Management.

Approval of a request for use of an alternative means of protection made pursuant to these provisions shall be limited to the particular case covered by request and shall not be construed as establishing any precedent for any future request except in substantially equivalent situations.

[DWR's Building Code Team is in discussion of merits and means to advise future owners and/or occupants that alternate means of protection have been approved, such as recording notices on deeds and signage.]

## XXX.8.2 Appeals.

When a request for an alternate means of protection has been denied by the building official, the applicant may file a written appeal with the board of appeals. In considering such appeal, the board of appeals may provide additional information to, and request additional written DWR Proposed California Building Standards Code Update. Preliminary. Subject to Revision.

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statements from, the Central Valley Flood Protection Board, the California Department of Water Resources, and the Governor's Office of Emergency Management. If such additional written statements are provided, the board of appeals shall consider those statements.



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## **TEXTS FROM THE CODE**

Chapter 10 Means of Egress

Only intro section for 1008.1 is shown (rest is lengthy)

1008.1 Doors.

Means of egress doors shall meet the requirements of this section. Doors serving a means of egress system shall meet the requirements of this section and Section 1018.2. Doors provided for egress purposes in numbers greater than required by this code shall meet the requirements of this section.

Means of egress doors shall be readily distinguishable from the adjacent construction and finishes such that the doors are easily recognizable as doors. Mirrors or similar reflecting materials shall not be used on means of egress doors. Means of egress doors shall not be concealed by curtains, drapes, decorations or similar materials.

## 1009 Stairways

1009.11 Stairway to roof. In buildings located four or more stories in height above grade plane, one stairway shall extend to the roof surface, unless the roof has a slope steeper than four units vertical in 12 units horizontal (33-percent slope). In buildings without an occupied roof, access to the roof from the top story shall be permitted to be by an alternating tread device.

1009.11.1 Roof access. Where a stairway is provided to a roof, access to the roof shall be provided through a penthouse complying with Section 1509.2.

Exception: In buildings without an occupied roof, access to the roof shall be permitted to be a roof hatch or trap door not less than 16 square feet (1.5 m2) in area and having a minimum dimension of 2 feet (610 mm).

1009.11.2 Protection at roof hatch openings. Where the roof hatch opening providing the required access is located within 10 feet (3049 mm) of the roof edge, such roof access or roof edge shall be protected by guards installed in accordance with the provisions of Section 1013.

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## Chapter 11A, Housing Accessibility

1101A.1 Scope. The application and authority of this chapter are identified and referenced in Sections 108.2.1.2 and 1102A for the Department of Housing and Community Development. Applicable sections are identified in the Matrix Adoption Tables of this code under the abbreviation HCD 1-AC. The provisions of this chapter shall apply to the following:

- 1. All newly-constructed covered multifamily dwellings.
- 2. New common use spaces serving existing covered multifamily dwellings.

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- 3. Additions to existing buildings, where the addition alone meets the definition of a covered multifamily dwelling.
- 4. Common-use areas serving covered multifamily dwellings.

These building standards generally do not apply to public accommodations such as hotels and motels. Public use areas, public accommodations, and housing which is publicly funded as defined in Chapter 2, Chapter 11A, and Chapter 11B of this code are subject to provisions of the Division of the State Architect (DSA-AC) and are referenced in Section 109.1.1.

ACCESSIBLE ROUTE is a continuous and unobstructed path connecting all accessible elements and spaces in a building or within a site that can be negotiated by a person with a disability using a wheelchair, and that is also safe for and usable by persons with other disabilities. Interior accessible routes may include corridors, hallways, floors, ramps, elevators, and lifts. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps, and lifts.

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Chapter 11B Accessibility to Public Buildings, Public Accommodations, Commercial Buildings and Publicly Funded Housing

ACCESSIBLE ROUTE OF TRAVEL is a continuous unobstructed path connecting all accessible elements and spaces in an accessible building or facility that can be negotiated by a person with a disability using a wheelchair and that is also safe for and usable by persons with other disabilities, and that is consistent with the definition of "Path of travel" in this section. Interior accessible routes may include corridors, floors, ramps, elevators, lifts and clear floor space at fixtures. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, sidewalks, ramps, and lifts. An accessible route does not include stairs, steps, or escalators.

#### 1131A Doors

1132A.1 Primary entry doors and required exit doors. The primary entry door and all required exit doors shall comply with the requirements of this section. The requirements of Sections 1126A.3 shall apply to maneuvering clearances at the side of the door exposed to common or public use spaces (e.g. entry or exit doors which open from the covered multifamily dwelling unit into a corridor, hallway or lobby, or directly to the outside).

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